Editorial Index 1967

Index to editorial articles appearing in Iron Age Metalworking International during the year 1967

Automation & Data Processing
Adaptive Control: Can We Teach Machines to Think for Themselves? Dec p 38
Computerized Lubrication, Sept p 53
Computer System Halves Stocks, July p 34
Data Collection System Speeds Work Flow, July p 30
Finishing: Automated Handling and Inspection, Jan p 32
Fluid Logic Punch, July p 23
Ideal Team: N/C and Computers, Sept p 48
Integrated Systems: Multi-Level Planning and Control, Jan p 33
New Fluidic Devices Solve Some Control Problems, Nov p 34
New Metalworking Processes: A Worldwide Progress Report, Oct p 29
Simpler N/C Programming With EXAPT, Sept p 50

Brazing
New Product Designs Make Greater Use of Brazing, Apr p 34
Vacuum Brazing of Impellers, Mar p 29

Castings
Casting Replaces Stamping, Jan p 37
Diecasting Precision Improved by New Technique, Oct p 46
Die Materials Lead to Die Casting Progress, iune p 34
Dies For Titanium, July p 31

Forming & Extruding
Cold Forming Flanges, Dec p 40
Extruding at High Temperatures, Mar p 24
Research Projects Refine Explosive Forming Technique, Oct p 34

Fasteners
Adhesives Are Used to Keep Fasteners in Place, Aug p 26
Fasteners: A Challenge to the Design Engineer, Nov p 30
High-Speed Dies Form Screws, Apr p 39
Stronger Fastener Threads, Aug p 39
The Future of Fasteners, Nov p 27
Weld Fasteners Find Growing Use in Metal-Working, Sept p 56

Forging
Ausforging Gives Added Strength to Steel, Apr p 32
Electric Controls Modernize New Open Die Forge, Dec p 50
Forging Technology Expands to Meet Market Needs, July p 26
Giant Forging Press Shapes Large Parts, Aug p 29
Study of Metal Flow Improves Knowledge of Forging, May p 42
Titanium: Metal With Unique Properties, Feb p 15
Transfer Speeds Presswork, Nov p 36
Versatile Forging Plant is Highly Mechanized Oct p 38

Heat Treating
"Roller Quench" Is Unique Feature Of a New Heat Treating Line, Mar p 22
Rollers Remove Wrinkles, Jan p 39
Slabs Leave Furnace Without Scale, Dec p 48
Tougher Gears, Less Distortion Result of New Heat Treatment, June p 36

Inspection
High-Speed Sample Handling, Aug p 29
Isotopes: A Measurement Report, June p 46
Lasers Light Up Stresses, Feb p 25
Measuring Surface Roughness, Sept p 58
New Controls and In-Process Detectors Improve Weld Quality, June p 27
Novel Alignment System, Feb p 29
Rapid Gear Inspection, July p 25
Ultrasonic Testing Locates Defects in Metals, May p 44
Ultrasound Tests Tubes, Dec. p 49
X-Ray Fluorescence Measures Thickness of Coatings, Oct p 48

Instrumentation
Novel Alignment System, Feb p 29
Tuning Fork Controls Speed of Motors, Oct p 36

Joining
Friction Welds Strapping, Feb p 27
Infrared Solders Cable, Nov p 45
Plastic-Aluminium Composites, Apr p 40

Lubrication
Bearing Aligns Itself, Mar p 31
Computerized Lubrication, Sept p 53

Machining & Machine Tools
Abrasive Belt Grinds Clean, Jan p 41
Adaptive Control: Can We Teach Machines to Think for Themselves? Dec p 38
Advances in Diamond Grinding, Sept p 47
Automatic Tool-Setting System Improves Turning Performance, May p 35
Chips Removed in Sawing, Mar p 25
Combined Machine Increases Output And Accuracy, July p 28
Complex Spline Hobbing Jobs Eased By Double Differential, Mar p 34
Dial-In Chucking Machine Combines Versatility and Speed, Feb p 28
Diamond Tools Improve Honing, Feb p 30
Diamond Tools Shape Tube, Apr p 43
Dry Honing Steel Blades, Sept p 53
ECM Works on Turbine Blades, Mar p 26
Electrolytic Grinding Moves Into Production, Apr p 25
European Machine Tool Exhibition Preview, Sept p 69
Fluidic Controls Used On Machine Tools, Feb p 24
Heavy Workpieces Machined With Balanced Headstock, Nov p 40
High-Speed Machining Centre Handles Large Parts, Mar p 32
Honing Improves Part Geometry, May p 46
Honing Makes A Better Gear, Jan p 38
Ideal Team: N/C and Computers, Sept p 48
Improved Beryllium Copper Alloy Machines Quickly, Smoothly, Jan p 42
Linked Machines Grind and Polish Tubes, Oct p 37
Major Machine Tool Users Give Their Views on How to Increase Productivity, Sept p 41
New Boring Technique, Nov p 46
New Metalworking Processes: A Worldwide Progress Report, Oct p 29
Novel Alignment System, Feb p 29
N/C Improves Valve Making, Feb p 33
Numerical Control Lathe Speeds Tool Change, Nov p 33
N/C Programme Simplifies Die Machining, Aug p 38
Numerical Control Router Increases Output, July p 32
Optical Jig Borer Combines Accuracy With Productivity, Jan p 44
Override Speeds Milling, Jan p 43
Pulsing Coolant Flow, June p 37
Rolling Rounds Gears, Nov p 39
Simpler N/C Programming With EXAPT, Sept p 50
Sizing Without Gauging, Nov p 46
Stronger Grinding Wheels, July p 29
TFE Takes Machining With Ease, Apr p 38
"Tilt Mill" Cuts Curves, June p 43
Titanium Carbide Opens New Era in Cutting Tools, Aug p 36
Tracer Lathe Raises Output, Apr p 41
Transfer Line Machines and Assembles, Dec p 44
Tungsten Carbide Rod Saw, Mar p 33
Turbine Wheels Spark Machined, Nov p 37
Unusual Transfer Line Utilises Three Copying Lathes, Oct p 44
Variable Feed Hobber, May p 41
Vertical Lathe Replaces Four Machine Tools, June p 41
Vertical Lathe Solves Chip Problem, Aug p 40

Management
Data Collection System Speeds Work Flow, July p 30
Law Forms Framework For Training Programme, June p 40
New Training Methods Increase Productivity, May p 32
Programming Improves Skills, Sept p 60
Six Areas Worth Watching In Setting up a New Plant, Mar p 28
Starting Up a Steelworks: Men Before the Mill, Feb p 18
Training Plan Eases Problems of Starting New Plant, Apr p 30
Workers Suggest Ways to Reduce Costs, Apr p 42

Materials Handling
Computer System Halves Stocks, July p 34
Friction Welds Strapping, Feb p 27
High-Speed Sample Handling, Aug p 27
Linked Machines Grind and Polish Tubes, Oct p 37
Moving Storage Trays, Apr p 33
New Techniques Increase Use of Non-metallic Strapping, June p 44
Slag Transport Costs Cut in Half, Oct p 41

Materials
Aluminium: The International Metal, May p 27
Dip Forming of Bimetallic Wire, May p 37
High-Strength Aluminium Pursues Markets Dominated by Steel, Aug p 30
Improved Beryllium Copper Alloy Machines Quickly, Smoothly, Jan p 42
Improved Stainless Steels, Aug p 35
Liquid PE Dispersions Coat Steel, Aluminium, Copper, Dec p 46
New Electroforming Advances Update Process, Nov p 42
New Plastic Handles Hot Acids, Dec p 41
Precious Metals: A Growing Role in Industry, July p 17
Plastic-Aluminium Composites, Apr p 40
Plastic Plating Process, July p 33
Plating Lead on Steel, May p 45
TFE Takes Machining With Ease, Apr p 38
Titanium Carbide Opens New Era in Cutting Tools, Aug p 36
Titanium: Metal With Unique Properties, Feb p 15
Trends in Plastic Coated Piping, Aug p 32

Metal Finishing
Abrasives Replace Acid in Descaling Steel Strip, Sept p 54
Another Black Chromium Plate is Developed Apr p 44
Closed-Loop Chrome Recovery, Oct p 33
Dip Forming of Bimetallic Wire, May p 37
Electroforming Aluminium, Sept p 59
High-Output Metallising Plant, Aug p 42
Horizontal Pickling Line Designed For Hydrochloric Acid, Feb p 22
Lead Phosphate Protects Steel and Preserves its Weldability, Aug p 28
Liquid PE Dispersions Coat Steel, Aluminium, Copper, Dec p 46
Measuring Surface Roughness, Sept p 58
Microcracked Chromium Plate Improves Corrosion Resistance, June p 32
New Chromium Coatings, Nov p 41
New Copper Sulfate Bath Improves Plating Quality, July p 24
New Metalworking Processes: A Worldwide Progress Report, Oct p 29
Nickel Slurry Coats Steel Strip, Apr p 28
Painting Galvanised Steel, Jan p 40
Plastic Plating Process, July p 33
Plating Lead on Steel, May p 45
Precious Metals: A Growing Role in Industry, July p 17
Shipyards Use New Techniques to Cut, Clean and Weld Plate, Aug p 23
Standard Mill Is Modified To Produce Galvanized Tubing, June p 42
Technical Innovations Expand Galvanised Steel Use, Dec p 35
Trends in Plastic Coated Piping, Aug p 42
Vacuum Impregnation, May p 43
X-Ray Fluorescence Measures Thickness of Coatings, Oct p 48

Metallurgy
Die Materials Lead To Die Casting Progress, June p 34
How Metals Solidify, Dec p 43
Study of Metal Flow Improves Knowledge of Forging, May p 42
Technical Innovations Expand Galvanised Steel Use, Dec p 35
Ultrahigh Pressure Makes Metal Act in New Ways, June p 30

Plastics
Liquid PE Dispersions Coat Steel, Aluminium, Copper, Dec p 46
New Plastics Handles Hot Acids, Dec p 41
New Techniques Increase Use of Non-metallic Strapping, June p 44
Plastic-Aluminium Composites, Apr p 40
Plastic Plating Process, July p 33
TFE Takes Machining With Ease, Apr p 38
Trends in Plastic Coated Piping, Aug p 32

Powder Metallurgy
Forging Powder Preforms Combine Strength, Economy, Nov p 38

Power Transmission
Bearing Aligns Itself, Mar p 31
Tuning Fork Controls Speed of Motors, Oct p 36

Presswork & Presses
A Versatile Press, Dec p 37
Dies for Titanium, July p 31
Increasing Productivity in Sheetmetal Forming, Dec p 31
New Metalworking Processes: A Worldwide Progress Report, Oct p 29
N/C Programme Simplifies Die Machining, Aug p 38
Press Attains High Speeds, Mar p 36
Test Jig Matches Die To The Job, Feb p 21
Ultrahigh Pressure Makes Metal Act in New Ways, June p 30

Rolling
Advanced Aluminium Rolling Mill, Feb p 26
Aluminium: The International Metal, May p 27
Five-in-One Rolling Mill, June p 38
Galati Plate Rolling Mill, Dec p 45
More Mills Use Permanent Magnet Motors, Oct p 47
New Mill for Light Gage Steel, May p 40

Stamping
Casting Replaces Stamping, Jan p 37
Fluid Logic Punch, July p 23
"Scroll Slitting" Saves Metal For Stamping Operations, Jan p 36

Steelmaking
Abrasives Replace Acid in Descaling Steel Strip, Sept p 54
Blast Furnaces: Automated Charging and Computer Control, Jan p 27
Compact Shearing Line Reduces Space Needs, Mar p 30
Data Collection System Speeds Work Flow, July p 30
Finishing: Automated Handling and Inspection, Jan p 32
Five-in-One Rolling Mill, June p 38
Fuel Injection Improves Blast Furnace Control, Apr p 36
High-Speed Sample Handling, Aug p 27
Horizontal Pickling Line Designed For Hydrochloric Acid, Feb p 22
Integrated Systems: Multi-Level Planning and Control, Jan p 33
Iron Ore: Sintering and Pelletizing Control, Jan p 26
Isotopes: A Measurement Report, June p 46
Galati Plate Rolling Mill, Dec p 45
Lead Phosphate Protects Steel and Preserves its Weldability, Aug p 28
More Mills Use Permanent Magnet Motors, Oct p 47
New Mill for Light Gage Steel, May p 40
New Process Makes Molten Iron Without Coke, Nov p 44
Nickel Slurry Coats Steel Strip, Apr p 28
"OG" Gas Recovery Equipment Improves Yield of BOF Plant, Mar p 20
Push Press Speeds Production of Tubing, Aug p 34
Renewed Interest Shown in Hyl Direct Reduction Process, July p 22
"Roller Quench" Is Unique Feature Of a New Heat Treating Line, Mar p 22
Rollers Remove Wrinkles, Jan p 39
Rolling Mills: Control Extends to Soaking Pits and Slab Reheating, Jan p 30
Six Areas Worth Watching In Setting up a New Plant, Mar p 28
Slabs Cast by Melting, Mar p 21
Slabs Leave Furnace Without Scale, Dec p 48
Slag Transport Costs Cut in Half, Oct p 41
Spray Process Holds Promise for Continuous Steelmaking, May p 38
Stainless Steel Produced With Top-Blown Oxygen, Oct p 42
Starting Up a Steelworks: Men Before the Mill, Feb p 18
Steelmaking Shop: Final Temperature And Analysis Improved, Jan p 28
Stronger Grinding Wheels, July p 29
Testing Heavy Plate, Dec p 47
Why Refractories Wear, Feb p 32

Testing
High-Speed Sample Handling, Aug p 27
Testing Heavy Plate, Dec p 47
Ultrasonic Testing Locates Defects in Metals, May p 44

Welding
Choosing a Process to Weld Aluminium, July p 20
Cold Forming Flanges, Dec p 40
High-Strength Aluminium Pursues Markets Dominated by Steel, Aug p 30
Improved Stainless Steels, Aug p 35
Lead Phosphate Protects Steel and Preserves its Weldability, Aug p 28
New Controls and In-Process Detectors Improve Weld Quality, June p 27
New Techniques Increase Speed of Flame Cutting, Mar p 17
New Welding Method Restores Fractured Machinery, Oct p 40
Precious Metals: A Growing Role In Industry, July p 17
Shipyards Use New Techniques To Cut, Clean and Weld Plate, Aug p 23
Stud Welding, May p 36
Ultrasound Tests Tubes, Dec p 49
Weld Fasteners Find Growing Use in Metalworking, Sept p 56